

Serial No.: 10/601,576

In the Claims:

1-14. canceled.

15 (new) A silicon single crystal wafer for a particle monitor,

said wafer comprising a low particle density wafer body including a surface portion, wherein the surface portion has a surface density of crystal-originated particles of not more than  $15 \text{ counts/cm}^2$ , the crystal-originated particles counted as part of the surface density having a particle size of not less than  $0.12 \mu\text{m}$ , the surface density of crystal-originated particles present even after repeating a Standard Cleaning -1, which is made using alkaline chemical liquid mainly containing  $\text{NH}_4\text{OH}$ ,  $\text{H}_2\text{O}_2$ , and  $\text{H}_2\text{O}$ ,

the wafer and surface portion derived from an ingot that has been grown using the Czochralski method and then sliced to form the wafer, growing of the ingot including a step of controlling a time period of passing the ingot through a temperature range from  $1150^\circ\text{C}$  to  $1070^\circ\text{C}$  to be within 20 minutes and controlling a time period of passing the ingot through a temperature range from  $900^\circ\text{C}$  to  $800^\circ\text{C}$  to be within 40 minutes, said step minimizing a size of the crystal-originated particles and the presence of bulk micro-defects so as to form the low particle density wafer body and surface portion, the formed low particle density wafer and surface portion having a crystal-originated particle density such that removal of a part of the surface portion as a result of repeated Standard Cleaning -1 steps produces a remaining surface portion that still has the surface density of crystal-originated particles of not more than  $15 \text{ counts/cm}^2$ .

16. (new) The wafer of claim 15, wherein said wafer has an oxygen concentration of not more than  $13 \times 10^{17}$  atoms/cm<sup>3</sup> (old ASTM).

17. (new) The wafer of claim 15, wherein said silicon single crystal ingot has a nitrogen concentration of  $1 \times 10^{13} - 1 \times 10^{15}$  atoms/cm<sup>3</sup>.

18. (new) The wafer of claim 16, wherein said silicon single crystal ingot has a nitrogen concentration of  $1 \times 10^{13} - 1 \times 10^{15}$  atoms/cm<sup>3</sup>.

19. (new) The wafer of claim 15, wherein said low particle density wafer and surface portion with said crystal-originated particle density is such that removal of the part of the surface portion to produce the remaining surface portion still has the surface density of crystal-originated particles of not more than 15 counts/cm<sup>2</sup> when the Standard Cleaning -1 is repeated six times, and each cleaning is carried out for 10 minutes.